### LUGGAGE ASSEMBLY

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## BACKGROUND OF THE INVENTION

## 1. Field of the Invention

The invention relates to a luggage assembly, more particularly to a durable and lightweight luggage assembly.

# 2. Description of the Related Art

A conventional luggage assembly includes a pair of parallel upright tubular members, upper and lower mounting seat members, a reinforcing frame, a luggage shell, and a pull handle unit.

Each of the tubular members has top and bottom end portions. The upper and lower mounting seat members are connected respectively to the top end portions and the bottom end portions of the tubular members. The reinforcing frame interconnects the upper and lower mounting seat members, and is made of steel. The luggage shell is disposed to surround the tubular members, the upper and lower mounting seat members, and the reinforcing frame. The pull handle unit is disposed externally of the luggage shell, and is fastened to reinforcing frame.

Although the conventional luggage assembly achieves its intended purpose, the reinforcing frame is relatively heavy. To solve this problem, it has been proposed to use a reinforcing frame made of aluminum. This, however, can cause other problems. Particularly,

the reinforcing frame is easily deformed when the luggage assembly is carried using the pull handle unit.

### SUMMARY OF THE INVENTION

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Therefore, the object of the present invention is to provide a luggage assembly that is relatively light, while without compromising the overall structural strength thereof so as to overcome the aforesaid drawback of the prior art.

According to the present invention, a luggage assembly comprises an upright tubular member, upper and lower mounting seat members, upper and lower horizontal plate members, a luggage shell, and a pull handle unit. The upright tubular member has top and bottom end portions. Each of the upper and lower mounting seat members is made of a rigid plastic material, and has front and rear end portions. Each of the front and rear end portions of each of the upper and lower mounting seat members has top and bottom sides. The rear end portions of the upper and lower mounting seat members are mounted respectively on the top and bottom end portions of the upright tubular member. Each of the upper and lower horizontal plate members has front and rear end portions, and is made of a rigid plastic material. The upper horizontal plate member is mounted on the bottom side of the front end portion of the upper mounting seat member. The lower horizontal plate member is mounted on the top side of the front end portion of the lower mounting seat

member. The luggage shell is made of fabric and is disposed to surround the upright tubular member, the upper and lower mounting seat members, and the upper and lower horizontal plate members. The luggage shell includes a front wall, a rear wall, a side wall connected to the front and rear walls, a first welt formed at a juncture of the front and side walls, and a second welt formed at a juncture of the rear and side walls. The pull handle unit is disposed externally of the luggage shell, and includes a mounting seat fastened to the front end portion of the upper mounting seat member and the upper horizontal plate member, and a handle member pivotally retained on the mounting seat.

### BRIEF DESCRIPTION OF THE DRAWINGS

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Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment with reference to the accompanying drawings, of which:

Figure 1 is an exploded perspective view of the preferred embodiment of a luggage assembly according to this invention;

Figure 2 is an assembled perspective view to illustrate a luggage shell of the preferred embodiment; and

25 Figure 3 is a sectional view of the preferred embodiment.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figures 1 to 3, the preferred embodiment of a luggage assembly 1 according to this invention is shown to include an upright tubular member 11, upper and lower mounting seat members 13, 12, upper and lower horizontal plate members 16, 15, a luggage shell 20, and a pull handle unit 30.

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The tubular member 11 has top and bottom end portions 112, 111. Each of the upper and lower mounting seat members 13, 12 is made of a rigid plastic material, has front and rear end portions 132, 122, 131, 121, and is generally L-shaped. In particular, each of the upper and lower mounting seat members 13, 12 has a horizontal section that serves as the front end portion 132, 122 and a vertical section that serves as the rear end portion 131, 121. Each of the front end portions 132, 122 of each of the upper and lower mounting seat members 13, 12 has top and bottom sides. Each of the rear end portions 131, 121 of the upper and lower mounting seat members 13, 12 is formed with an insert hole 133, 123. In this embodiment, the rear end portions 131, 121 of the upper and lower mounting seat members 13, 12 are mounted respectively on the top and bottom end portions 112, 111 of the tubular member 11 such that the top and bottom end portions 121, 111 of the tubular member 11 extend fittingly and respectively into the insert holes 133, 123 in the rear end portions 131, 121 of the upper and lower mounting seat members 13, 12.

Each of the upper and lower horizontal plate members 16, 15 is made of a rigid plastic material, has front and rearend portions 162, 161, 152, 151, and is generally rectangular in shape. In this embodiment, the upper horizontal plate member 16 is mounted on the bottom side of the front end portion 132 of the upper mounting seat member 13 such that the front end portion 162 of the upper horizontal plate member 16 projects relative to the front end portion 132 of the upper mounting seat member 13. On the other hand, the lower horizontal plate member 15 is mounted on the top side of the front end portion 122 of the lower mounting seat member 12.

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The luggage shell 20 is made of fabric and is disposed, in a known manner, to surround the tubular member 11, the upper and lower mounting seat members 13, 12, and the upper and lower horizontal plate members 16, 15. In this embodiment, the luggage shell 20 includes a front wall 23, a rear wall 22, a side wall 21 connected to the front and rear walls 23, 22, a first welt 25 formed at a juncture of the front and side walls 23, 21, and a second welt 24 formed at a juncture of the rear and side walls 22, 21.

The pull handle unit 30 is disposed externally of the luggage shell 20, and includes a mounting seat 31 fastened to the front end portion 132 of the upper mounting seat member 13 and the rear end portion 161 of the upper horizontal plate member 16, and a handle member 32 pivotally retained on the mounting seat 31.

The luggage assembly 1 further includes a bezel 14 disposed externally of the luggage shell 20 and fastened to the rear end portion 131 of the upper mounting seat member 13. The bezel 14 is formed with a hole 141 that is aligned with the insert hole 133 in the rear end portion 131 of the upper mounting seat member 13 when the bezel 14 is fastened to the upper mounting seat member 13.

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The luggage assembly 1 further includes an extension handle member 40 extendable and retractable through the bezel 14, the luggage shell 20, and the tubular member 11. The handle member 40 has a handgrip 42 and a towing bar 41 that are respectively received in the bezel 14 and the upright tubular member 11 when the handle member 40 is retracted. The handgrip 42 is operated to extend or retract the handle member 40.

The luggage assembly 1 further includes a wheel unit 50 disposed externally of the luggage shell 20. In this embodiment, the wheel unit 50 is fastened to the lower horizontal plate member 15.

The luggage assembly 1 further includes a foot post unit 60 disposed externally of the luggage shell 20. In this embodiment, the foot post unit 60 is fastened to the lower horizontal plate member 15 and the lower mounting seat member 12.

Preferably, the wheel unit 50 includes a pair of wheels disposed respectively at the left and right parts

of the rear end portion 151 of the lower horizontal plate member 15. The foot post unit 60 is disposed at the front end portion 152 of the lower horizontal plate member 15.

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As mentioned hereinabove, each of the upper and lower mounting seat members 13, 12, and the upper and lower horizontal plate members 16, 15 is made of a rigid plastic material. Furthermore, the upper and lower horizontal plate members 16, 15 are free of a reinforcing frame connection therebetween. The construction as such reduces the overall weight of the luggage assembly 1 of this invention.

It has thus been shown that the luggage assembly 1 of this invention includes an upright tubular member 11, upper and lower mounting seat member 16, 15 that are mounted respectively on top and bottom end portions 112, 111 of the tubular member 11, upper and lower horizontal plate members 16, 15 that are mounted respectively on the upper and lower mounting seat members 13, 12, and a luggage shell 20 that is disposed to surround the tubular member 11, the mounting seat members 13, 12 and the horizontal plate members 16, 15, and that is formed with first and second welts 24, 25. The construction as such results in a lightweight structure without compromising the overall structural strength of the luggage assembly 1.

While the present invention has been described in

connection with what is considered the most practical and preferred embodiment, it is understood that this invention is not limited to the disclosed embodiment but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements.